

## CLAIMS

What is claimed is:

1. An apparatus comprising:

5 an intentional radiator including an antenna and a ground plane, the ground plane to be coupled to shielding that includes an opening for the antenna, the intentional radiator to be positioned such that the antenna radiates through the opening and the shielding and the ground plane reduce emissions through the opening.

10 2. The apparatus of claim 1 further comprising a shielding connection to couple the ground plane to the shielding.

3. The apparatus of claim 1 wherein the intentional radiator comprises a printed circuit board, the antenna being disposed on a first layer of the printed circuit board, the ground plane being disposed on a second layer of the printed circuit board.

4. An apparatus comprising:

20 an intentional radiator including an antenna and a ground plane; and shielding including an opening, the antenna to radiate through the opening, the shielding being coupled to the ground plane, the ground plane to reduce emissions through the opening.

5. The apparatus of claim 4 wherein the intentional radiator comprises a multi-layer printed circuit board, the antenna being disposed on a first layer of the printed circuit board, the ground plane being disposed on a second layer of the integrated circuit board.

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6. The apparatus of claim 4 further including a skin covering the opening.

7. The apparatus of claim 4 further including a shielding connection to couple the shielding to the ground plane.

8. The apparatus of claim 4 wherein the intentional radiator comprises a radio frequency module.

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9. A system comprising:

a device to be shielded;

an intentional radiator including an antenna and a ground plane;

shielding enclosing the device to be shielded except for an opening proximate to the antenna, the shielding being coupled to the ground plane to

20 reduce emissions through the opening by the device to be shielded.

10. The system of claim 9 further including a skin covering the opening.

11. The system of claim 9 wherein the device to be shielded is integrated with the intentional radiator.

12. The system of claim 9 wherein the intentional radiator includes a printed circuit board and wherein the antenna is included on a first layer of the printed circuit board and the ground plane is included on a second layer of the printed circuit board.

13. The system of claim 9 wherein the intentional radiator comprises a radio frequency module.

14. A method for integrating an intentional radiator in a system, the method comprising:  
coupling a ground plane of an intentional radiator to system shielding that includes an opening for an antenna coupled to the intentional radiator.

15. The method of claim 14 further including positioning the antenna to radiate through the opening.

16. The method of claim 14 wherein coupling the ground plane to the system shielding includes soldering a connection between the ground plane and the system shielding.

17. The method of claim 14 wherein coupling the ground plane to the system shielding includes mechanically connecting the ground plane and the system shielding.

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18. An apparatus comprising:

a means for shielding including an opening for an antenna; and

a means for coupling the shielding to a ground plane of an intentional radiator including the antenna, the ground plane and the means for coupling to reduce emissions through the opening.

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19. The apparatus of claim 18 wherein the means for shielding comprises one of a metallic paint or a metal enclosure.

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20. The apparatus of claim 18 wherein the means for coupling comprises one of mechanical connector or a soldered connection between the intentional radiator and the means for shielding.